AMENDMENTS TO THE SPECIFICATION

Please **insert** the following paragraph at page 1 after "Method of obtaining protective coatings on the surface of chemically active materials" :

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation application of United States Patent Application No. 10/792,125 filed on March 3, 2004, which is a continuation application of International Application No. PCT/AT02/00195, filed on July 5, 2002, published in German as International Publication No. WO 03/031100 on April 17, 2003, which claims priority to Austrian Patent Application No. A1585/2001, filed October 8, 2001, all of which are incorporated herein by reference in their entireties, and to all of which priority is claimed.

Please **insert** the following at page 3 before line 1:

SUMMARY OF THE INVENTION

The present invention relates to a method for the production of a protective coating on the surface of chemically active materials, comprising a mixture of a chemically active material and a meltable stable element. The method comprises providing at least one chemically active metal A, providing at least one fusible stable element B, mixing metal A and element B to form a mixture, treating the mixture with a liquid agent L, which is capable of dissolving metal A, but not capable of dissolving element B, at a temperature which is higher than the melting point of element B to create a coating on the surface of the mixture comprising substantially of element B, terminating the treatment when the desired thickness of the coating is achieved, removing the liquid agent L, purifying the mixture and drying the mixture.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the structure of an encapsulated granule according to the invention;

Figure 2 shows a general phase diagram of system of A-B, where A is an active metal and B is a fusible stable component;

Figure 3 shows a diagram of the mechanism of initiation of the formation of the protective coating;

Figure 4 shows a diagram of various stages of the formation of the protective coating;

Figure 5 shows a diagram of the coating or passivation of an ingot using the method of the present invention;

Figure 6a shows a dosing apparatus for delivery of granules for coating;

Figure 6b shows an apparatus for coating or passivation comprising a bath with liquid agent L;

Figure 6c shows a temperature profile of the bath in the apparatus for coating or passivation;

Figure 6d shows a view of the bunker and ratchet gear of the dosing apparatus along the line N-N;

Figure 7 shows a concentration triangle for system A-B_1-B_2, where A is an active metal, B_1 and B_2 are fusible elements, c_e is an eutectic composition, showing a shaded area along line A-c_e, which is preferable for the active core of a granule;

Figure 8 shows another apparatus for coating or passivation of granules as they melt from an ingot into a bath of liquid agent L;

Figure 9 shows a series of steps to charge the ingots into the encapsulation apparatus;

Figure 10 shows the general view of a granule before encapsulation;

Figure 11 shows an elemental analysis of the region marked with the X of the granule shown in Figure 10;

Figure 12 shows a granule having lights spots of indium (In) on its surface;

Figure 13 shows a granule having increased lights spots of In on its surface;

Figure 14 shows a granule having practically the whole surface covered with In;

Figure 15 shows the surface of a granule having triangle lacunas;

Figure 16 shows the elemental analysis of a light region from the surface of the granule, indicating that the region consists of In;

Figure 17 shows the morphology of a granule after encapsulation;

Figure 18 shows that the triangle lacunas have been eliminated;

Figure 19 shows a Na_8In_{11} granule having a diameter of 1.7 mm in an In shell.

DETAILED DESCRIPTION OF THE INVENTION